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Evaluating Energy & Sustainability Progress in DoD

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Office of the Secretary of Defense

Overview

- Why Sustainability for DoD?
- Introduction to DoD's Sustainability Plan
- Systems for Tracking Progress
- Fostering Successful Implementation



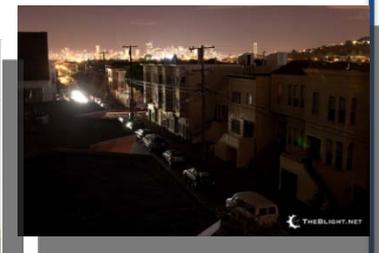
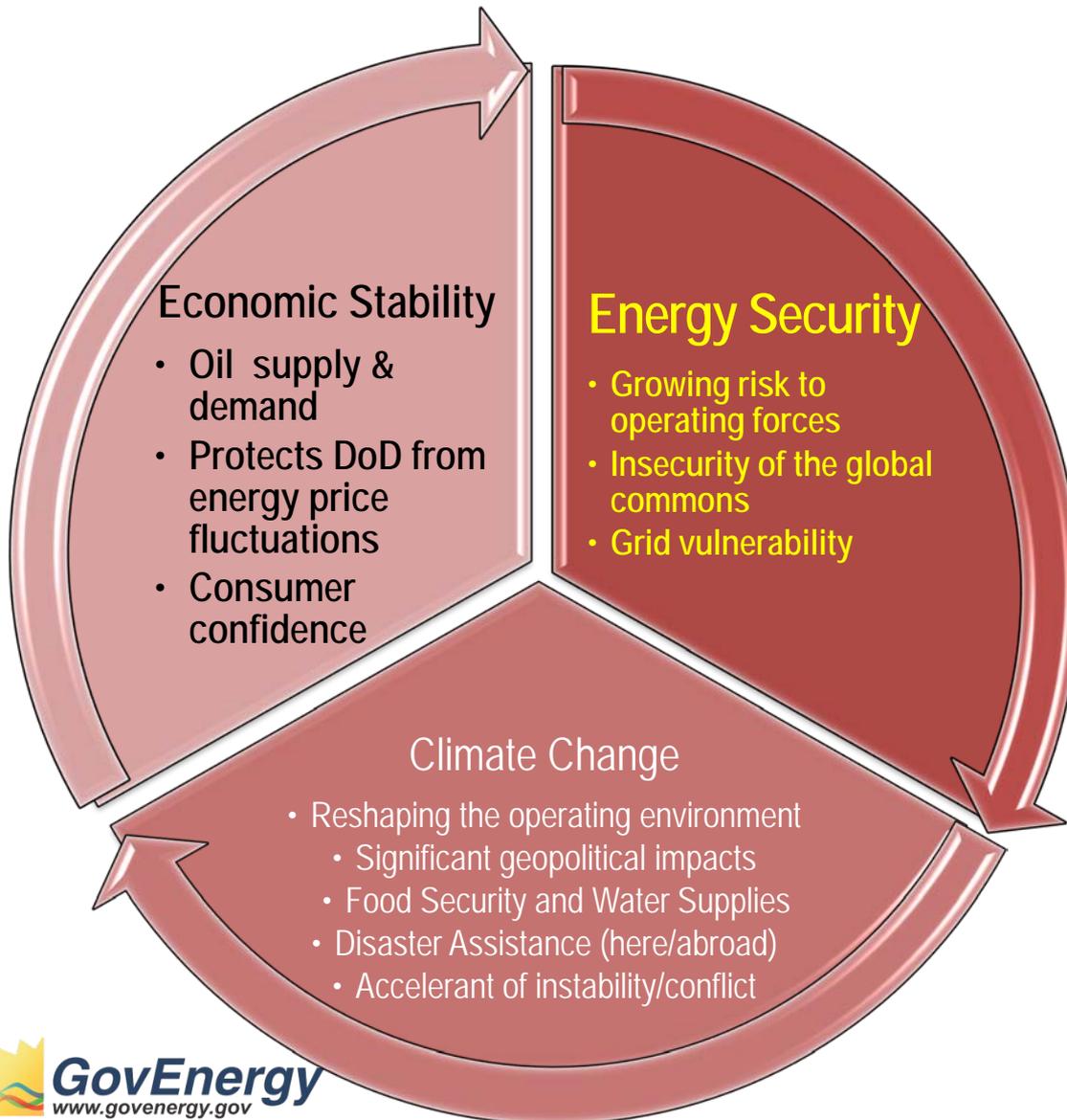
What is Sustainability to DoD?



VISION: The ability to operate into the future without decline – either in the *mission* or in the natural and manufactured systems that support it.



Energy-What's in it for DoD? National Security!



Relation of Sustainability to the DoD Mission

Reliance on Fossil Fuels

- risk for forces delivering fuel
- insecurity & volatility in supply & price
- vulnerability of electrical grid



Potable Water Resources

- risk for forces delivering it
- essential ingredient for military operations, human health
- scarcity exacerbates tensions in regions prone to conflict



Relation of Sustainability to the DoD Mission

Toxic and Hazardous Materials

- **harm health** of humans & ecosystems
- **impair readiness** (cleanup & handling costs, restrictions)
- **continued availability** of chemicals needed for mission

Vulnerability to Climate Change

- **can limit outdoor training**
- **sea level rise**
- **reduced fresh water supply**
- **damaged ecosystems**
- **increased smog (ozone)**
- **strained electricity supply**
- **wildfire frequency, intensity**
- **vector borne disease**



DoD's Strategic Sustainability Performance Plan

Built on 4 Key Mission-Oriented Themes

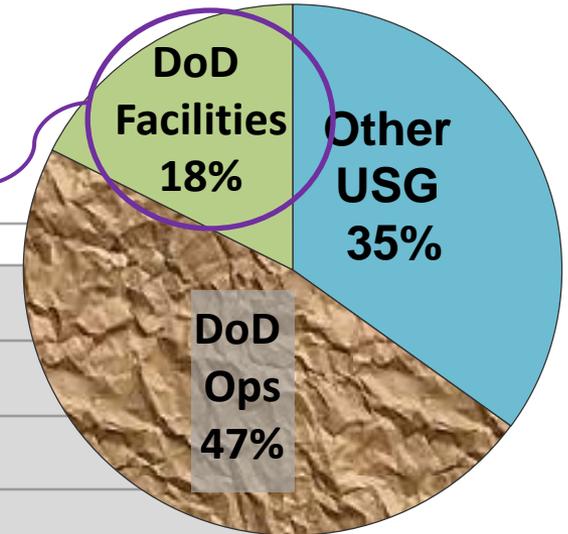


Challenge: Size and Complexity of DoD

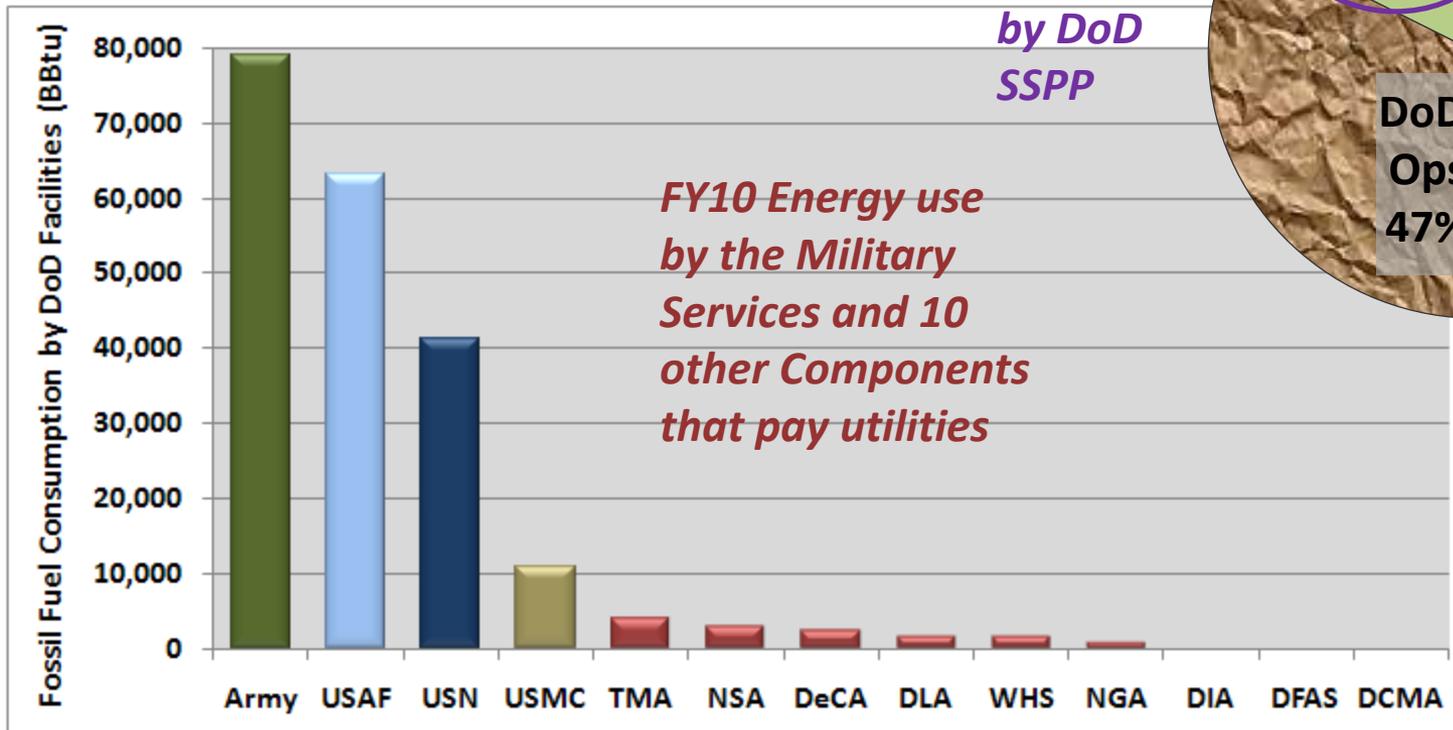
31 DoD Components: Army, Navy, Air Force + 28 others

- # Buildings (owned+ leased): 300,658
- # Vehicles (non-tactical): >197,000
- # Locations (global): 5,000
- Fossil-Fuel Use (facilities): >200 Billion Btu

Energy Use by Federal Gov't

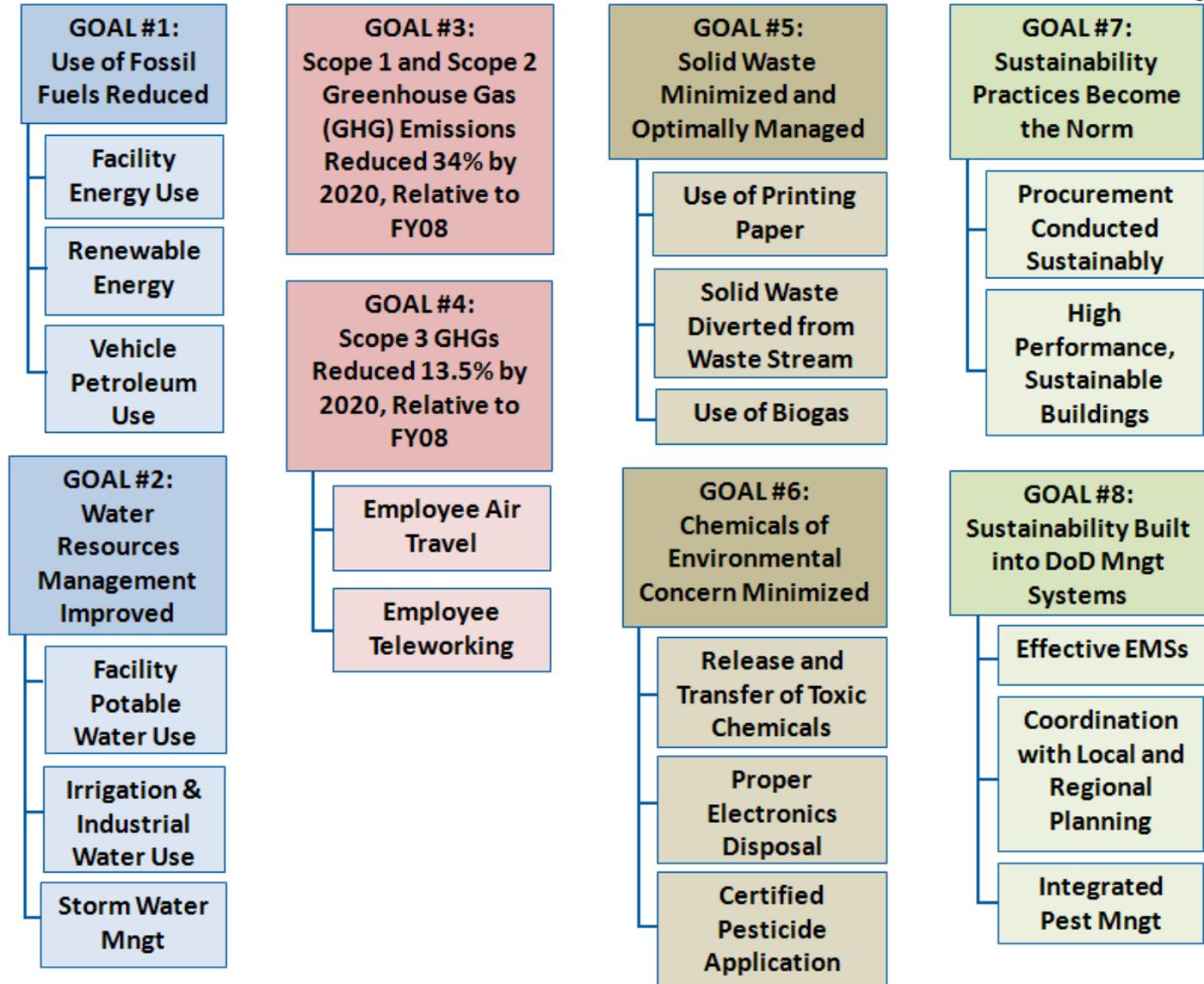


Covered
by DoD
SSPP



Framework for Tracking Sustainability Progress

8 Goals
19 Sub-Goals



DoD Systems For Tracking Progress on Specific Metrics

COMPLETE

➤ *Stormwater Runoff*

- **Navy tool to electronically track compliance on stormwater runoff & low-impact development**
- **Air Force stormwater hydrology analysis tool to estimate pre- and post-hydrology of AF sites**



IN PROGRESS

➤ *Teleworking*

- **Improved Tracking – OSD working to get data via Defense Finance & Accounting Services**
- **Need Better Count of Eligible Workers**
 - **DoD-wide application to track eligibility being developed**
- **Need More Laptops – End of life desktops being replaced with LAPTOPS & docking stations**



DoD Systems For Tracking Progress on Specific Metrics

COMPLETE

➤ *Green Buildings Tracking*

- Federal Real Property Profile (FRPP) database
- The record for each facility is made up of 26 data elements
 - One of those data elements is Sustainability
 - Tracks Federal building compliance with the Guiding Principles.



IN PROGRESS

- ### ➤ *Sustainable Acquisition – Goal 95%*
- Representative sampling of contracts
 - Military Departments and DLA
 - Issue - Need automated system!



DoD Systems For Tracking Progress on Specific Metrics

COMPLETE

➤ *Solid Waste Tracking*

- DoD has met or exceeded Solid Waste goals in the SSPP
- Knowledge Based Corporate Reporting System (KBCRS)
- Army Tool: SWARWeb (<http://www.denix.osd.mil/swarweb/index.cfm>)



IN PROGRESS

➤ *Energy Tracking*

- Energy and Water data is maintained on Excel spreadsheets
- Develop graphs/charts/tables for the Annual Energy Management Review



➤ *Toxics Chemical Reduction Tracking*

- TRI data is obtained from the EPA annually
- Data is maintained by DoD in an Access database
- MILDEP's developed Toxic Chemical Management Plans

DoD Systems For Tracking Progress on Specific Metrics

➤ Tracking Investments

- System for **budget exhibits** to track sustainability investments and resources *across DoD*
- Will help analysts & decision-makers I.D. gaps between \$\$ and sustainability objectives
- Will better align resources & objectives
- Timeframe: ~end of FY11

➤ Evaluating Military Installation Performance

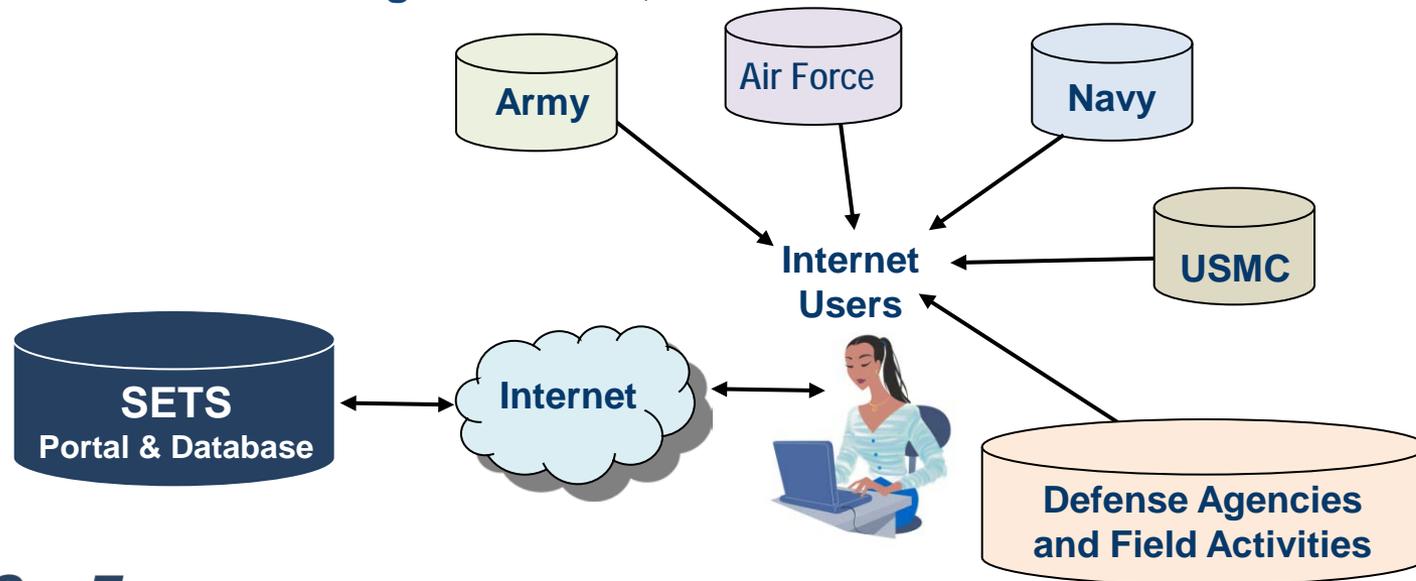
- Piloting methodology for installations to evaluate their sustainability performance
 - Phase I: pilots complete spring 2012
 - Phase II: develop tool if successful



DoD Systems For Tracking Progress: Sustainability Evaluation & Tracking System (SETS)

SETS...

- ✓ Secure WEB-based tracking tool for SSPP data collection and sustainability performance tracking
 - 21 metrics
 - entered by each Component
- ✓ Facilitates sustainability *benchmarking* and *transparency*
- ✓ Beta testing in summer; release Dec 2011





SUSTAINABILITY EVALUATION AND TRACKING SYSTEM

WELCOME

SETS facilitates automated tracking of DoD-wide sustainability goals and metrics, benchmarking, and automatic report generation



Welcome to the DoD Sustainability Evaluation & Tracking System.

OSD/AT&L has developed the Sustainability Evaluation & Tracking System (SETS) to assist in preparing the annual DoD Strategic Sustainability Performance Plan (SSPP) as required by Executive Order (EO) 13514. The tool provides a tracking mechanism to facilitate the implementation of sustainability measures and to track and report on results.

Key Benefits:

- Interfaces with existing data systems to capture information on SSPP reporting and implementation
- Facilitates automated tracking and reporting of progress against sustainability goals and metrics
- Provides the information & materials needed to write the next SSPP and ease the burden of data collection efforts
- Generates reports and graphics in various forms for analysis and reporting
- Complies and store data in searchable format

[CLICK HERE TO GET STARTED](#)

Do not show this page again. (You will be able to access this page in the home tab.)



SUSTAINABILITY EVALUATION AND TRACKING SYSTEM

Home> Department of Navy> Subgoal: 1.1.

DEPARTMENT OF NAVY

1.1. ENERGY CONSUMPTION INTENSITY BY DOD FACILITIES REDUCED



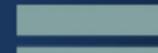
FY:	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Target:	18%	21%	24%	27%	30%	31.5%	33%	34.5%	36%	37.5%

Tracks progress, SSPP sub-goal targets, & supporting data entry at the component level

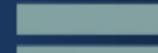
CURRENTLY: FY (10/11/2010-9/3/2011) DEFAULT

The percent reduction relative to FY 2003 in the total fossil fuel-generated energy consumed by DoD facilities per gross square foot (gsf) of total DoD building space. A facility is defined as per the Energy Independence and Security Act of 2007 (EISA) §432(1)(C) to be any building, installation, structure, or other property (including any applicable fixtures) owned or operated by, or constructed or manufactured and leased to, DoD. The term facility includes a group of facilities at a single location or multiple locations managed as an integrated operation, and contractor-operated facilities owned by DoD. It does not include any land or site for which the cost of utilities is not paid by DoD.

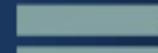
FY 2003 Fossil Fuel Energy Consumption (prorated, billions of BTU)



FY 2003 Total GSF (thousands of gross s.f.)



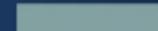
Fossil Fuel Energy Consumption (billions of BTU)



Total GSF (thousands of gross s.f.)



Solid Waste Minimized and Optimally Managed



Comments:

Supporting Documentation:

[ADD NEW](#)

Capability to upload and store supporting documentation and SSPP artifacts for each sub-goal



SUSTAINABILITY EVALUATION AND TRACKING

INFO REPOSITORY

DoD Case Studies, Lessons Learned, and Success Stories can be stored for quick and easy retrieval on an ongoing basis

Use this page at any time to upload any information, photos, or other graphics that relate to DoD sustainability, initiatives and projects. You may revisit this page at any time to add or edit information.

Entry Information

Name: Range:

Description:

Contact Information

Name: Organization:

Title:

Telephone:

Email:

Department of Defense
Navy

Data can be tagged to relevant sustainability topics and goal metrics

Attachment Information

Relevant Topics [edit]

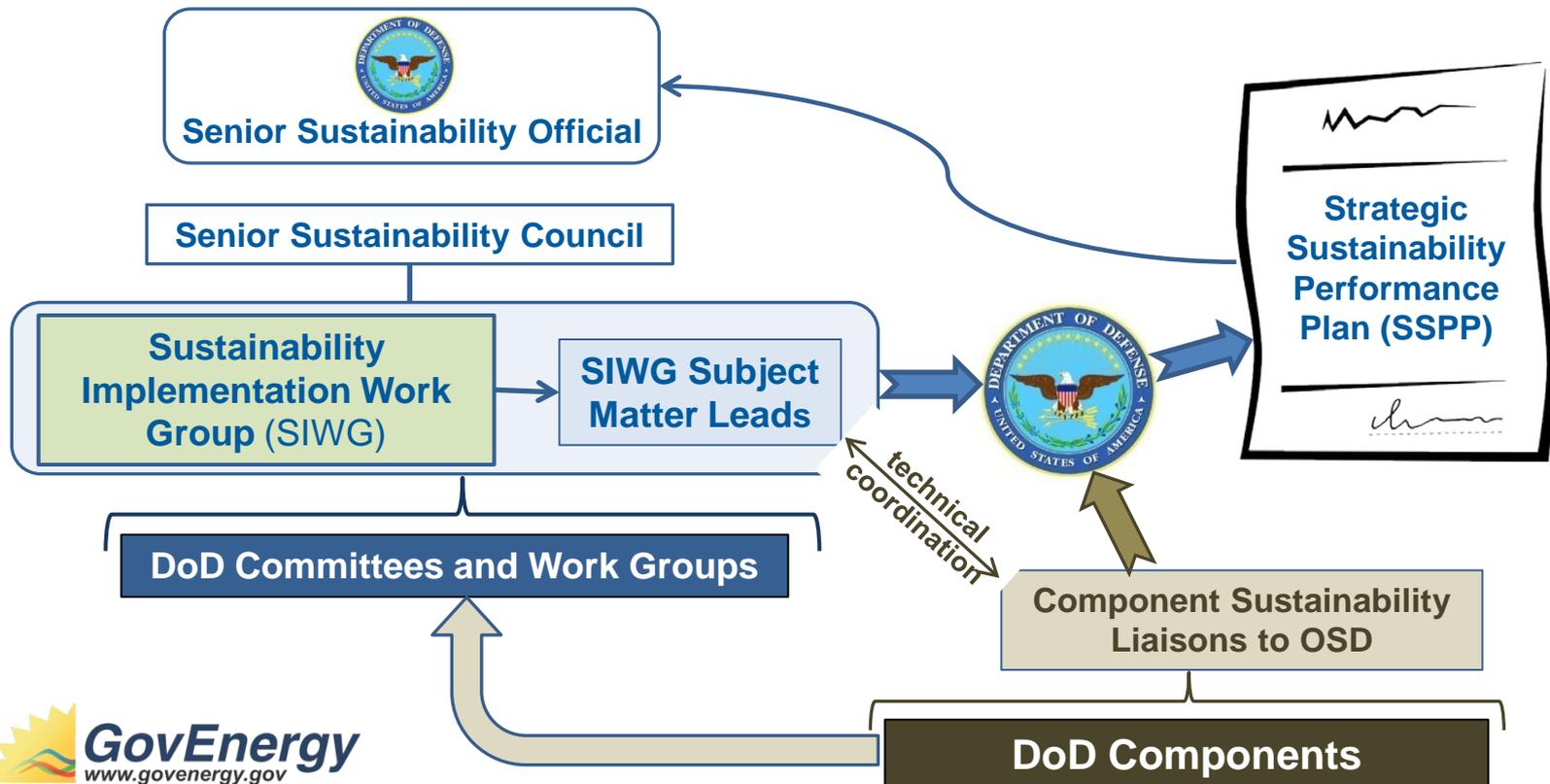
Select the topics that are relevant to the uploaded attachments.

- | | | | |
|---|---|---|---|
| <input type="checkbox"/> Energy Efficiency/Conservation | <input type="checkbox"/> Vehicles | <input type="checkbox"/> Water efficiency/conservation | <input type="checkbox"/> Wastewater treatment/Reclamation |
| <input type="checkbox"/> Renewable Energy | <input type="checkbox"/> Data Centers | <input type="checkbox"/> Sustainable/Green Procurement | <input type="checkbox"/> Pesticide Use/Management |
| <input type="checkbox"/> Scopes 1 & 2 GHG emissions | <input type="checkbox"/> Electronic Stewardship | <input type="checkbox"/> Use of printing paper | <input type="checkbox"/> Toxic Chemicals |
| <input type="checkbox"/> Scope 3 GHG emissions | <input type="checkbox"/> Teleworking | <input type="checkbox"/> Biogas (Landfills or Wastewater) | <input type="checkbox"/> Environmental Management Systems |
| <input type="checkbox"/> Employee Business Travel | <input type="checkbox"/> Stormwater management | <input type="checkbox"/> Solid Waste Management | <input type="checkbox"/> Local/Regional Integrated Planning |

Implementation Approaches: Planning by Components

Component Implementation Plans

- Help translate *DoD-Level policy* into **ACTION** on the ground
 - Comprehensive for Services & DLA; simplified for small agencies
 - Generate DoD-wide engagement in sustainability planning
- ✓ Planned methods ✓ Issues affecting performance ✓ Data collection issues



Fostering Successful Implementation: Policies Institutionalizing Sustainability

DoD Instruction (DoDI) on Sustainability

- Will establish comprehensive DoD policy on sustainability
 - ✓ Conveys what sustainability means to DoD
 - ✓ Delineates responsibilities
 - ✓ Expected in 2012



Other Sustainability Policies & Instructions...

- Sustainable Buildings (Oct 2010)
- Teleworking (Oct 2010)
- Stormwater (Jan 2011)
- Integrated Solid Waste Management (being prepared)
- Sustainable Ranges (being prepared)
- Sustainable Acquisition (being prepared)



Questions??



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